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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,697	02/12/2004	Bruce Schofield	16421BAUS01U	5707
34645 7590 04/18/2008 Anderson Gorecki & Manaras, LLP Attn: John C. Gorecki P.O BOX 553 CARLISLE, MA 01741			EXAMINER KEEFE, MICHAEL E	
			ART UNIT	PAPER NUMBER
			2154	
			NOTIFICATION DATE	DELIVERY MODE
			04/18/2008	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/777,697

**Applicant(s)**

SCHOFIELD ET AL.

**Examiner**

MICHAEL E. KEEFER

**Art Unit**

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This Office Action is responsive to the Amendment filed 1/7/2008. Claims 1-17 are pending.

***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 12-13, and 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Birdwell (US 6041359) in view of Percival et al. (US 5991816), hereafter Percival and further in view of Sanders, III et al. (US 2003/0083081), hereafter Sanders.

Regarding **claims 1 and 17**, Birdwell discloses:

receiving a transaction request relating to the delivery of at least one medical image from a data source to a data target on a network; (Fig. 3, step 50)

interfacing the data source and data target to coordinnle delivery between the data source, and data target; (at least Fig. 3 steps 60-66)

scheduling for delivery of the medical image between the data source and the data target on the network; (Fig. 3 step 56)

reserving network resources on the network for the delivery of the medical image over the network from the data source to the data target; (Fig. 4, step 74)

monitoring the delivery of the medical image over the network; and  
(Col. 8 lines 10-16 disclose monitoring the delivery to see if it needs to be  
stopped early)

Birdwell discloses all the limitations of claim 1 except for:

adjusting the steps of scheduling and reserving if necessary to  
accommodate higher priority transaction requests and network conditions.

The general concept of adjusting a schedule and reservation based off of priority  
or traffic is well known in the art as taught by Sanders. (See Fig. 3, if the first service is  
higher priority it adjusts the schedule of services to make the first service the currently  
active service instead of the second service)

It would have been obvious to one of ordinary skill in the art at the time of the  
invention to combine Birdwell and Sanders in order to allow certain types of service to  
have priority over other types of service.

Birdwell and Sanders disclose all the limitations of claims 1 and 17 except that  
the data transmitted is specifically medical images.

The general concept of sending medical images over the network is well known  
in the art as taught by Percival. (Abstract)

It would have been obvious to one of ordinary skill in the art at the time of the  
invention to modify Birdwell and Sanders with the general concept of sending medical  
images over the network as taught by Percival in order to send medical images from a  
packet network into a wireless network so that wireless clients can receive the images.

Regarding **claim 12**, Birdwell discloses:

Coordinating with a data source to transmit data over the resources. (at least Fig. 3 steps 60-66)

Regarding **claim 13**, Birdwell discloses:

Setting a class of service for the transaction request. (Fig. 3, step 54-56, determining the amount of bandwidth to reserve is setting a class of service for the request.)

4. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birdwell, Sanders, and Percival as applied to claim 1 above, and further in view of Kausik et al. (US 2004/0073867), hereafter Kausik.

Birdwell, Sanders, and Percival teach all the limitations of claims 2-3 except for understanding a work flow of transactions and anticipating upcoming requests.

Regarding **claim 2**, Kausik teaches:

wherein the step of scheduling comprises understanding a work flow of transactions on the network. ("The anticipated requests can be precomputed based on triggers reflecting users' historical access patterns." Abstract)

Regarding **claim 3**, Kausik teaches:

wherein the step of understanding the work-flow comprises anticipating upcoming transaction requests from at least one of other transaction requests, statistics, and transaction patterns. ("The anticipated requests can be precomputed based on triggers reflecting users' historical access patterns." Abstract, this involves

other transaction requests ("historical access") as well as the patterns of the transaction requests "historical access patterns".)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Birdwell, Sanders and Percival with the teachings of Kausik in order to increase network efficiency.

5. Claims 4-8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birdwell, Sanders and Percival as applied to claim 1 above, and further in view of Pandya et al. (US 6671724), hereafter Pandya.

Regarding **claim 10**, Birdwell discloses:

Scheduling a transaction request to occur some time in the future.

(Abstract "schedules reservations for the upcoming time period")

Regarding **claims 6-8**, Sanders teaches:

Sanders teaches determining priority between competing requests by time of day, identity of caller, and type of service (I.e. why the request was sent - the transaction request was sent to gain a type of service, therefore the type of service is the reason the request was sent) [0035]. Sanders also teaches adjusting the schedule of services based off of priority (Fig. 3), if the first service is higher priority, it adjusts the schedule of services to make the first service the currently active service instead of the second service.

Birdwell, Sanders and Percival teach all the limitations of claims 4-8 and 10 except for ascertaining relative priorities of the requests based on various network policies.

Pandya teaches ascertaining relative priorities of network requests by policies regarding (See Col. 9, lines 1-15): time of day, who issued the transaction request ("user identity"), and where the request was issued (IP source/destination address or device identity).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Birdwell, Sanders and Percival with Pandya in order to increase the efficiency of network resources.

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Birdwell, Percival, Pandya and Sanders as applied to claims 1, 4, and 10 above, and further in view of Ruttenberg et al. (US 2002/0083185), hereafter Ruttenberg.

Birdwell, Percival, Pandya, and Sanders teach all the limitations of claim 11 except for the request having an under-constrained requested timing.

The general concept of a request for a transaction including under-constrained timing details is well known in the art as taught by Ruttenberg. ([0033], note that "the deadline for data arrival" is an under-constrained request, as it merely requests that the data arrive by a certain time and does not give a specific time for transmission.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Birdwell, Percival, Pandya, and Sanders with the general concept of a request for a transaction including under-constrained timing details as taught by Ruttenberg in order to allow the system to use network resources more efficiently when a request does not need to be processed on demand.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Birdwell, Sanders, and Percival as applied to claim 1 above, and further in view of Hamilton et al. (US 6975963), hereafter Hamilton.

Birdwell, Sanders, and Percival teach all the limitations of claim 9 except for generating a histogram of network traffic over a day or week.

The general concept of creating a histogram of network traffic over a time period is well known in the art as taught by Hamilton. (Col. 10 lines 14-33 teach the creation of histograms for network traffic over varying time spans, which include days and weeks.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Birdwell, Sanders, and Percival with the general concept of creating a histogram of network traffic over a time period as taught by Hamilton in order to allow a network administrator to have access to data needed to configure scheduler settings.

8. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birdwell, Sanders, and Percival as applied to claim 1 above, and further in view of Kurose et al. (US 2001/0056459), hereafter Kurose.

Birdwell, Sanders, and Percival teach all the limitations of claims 14-15 except for finding a path for the data and reserving bandwidth along the path.

The general concept of using RSVP to reserve bandwidth for transactions is well known in the art as taught by Kurose. ([0008] teaches setting up a path, [0010] teaches reserving bandwidth along the previously set up path)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Birdwell, Sanders, and Percival with the general concept of using



RSVP to reserve bandwidth for transactions as taught by Kurose in order to ensure end-to-end quality of service and allow multi-hop transactions.

9. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Birdwell, Sanders, and Percival as applied to claim 16 above, and further in view of Hoogenboom et al. (US 2002/0054568), hereafter Hoogenboom.

Birdwell, Sanders, and Percival teach all the limitations of claim 16 except for rate-limiting applications.

The general concept of rate-limiting applications is well known in the art as taught by Hoogenboom. (Abstract, the switch enforces rate-limiting policies against virtual connections (i.e. applications) when a backlog reaches a certain level.)

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Birdwell, Sanders, and Percival with the general concept of rate-limiting applications as taught by Hoogenboom in order to prevent application starving (i.e. that certain applications will never be allocated any resources.)

### ***Response to Arguments***

10. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL E. KEEFER whose telephone number is (571)270-1591. The examiner can normally be reached on Monday through Friday 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MEK 4/12/2008

/Joseph E. Avellino/  
Primary Examiner, Art Unit 2146